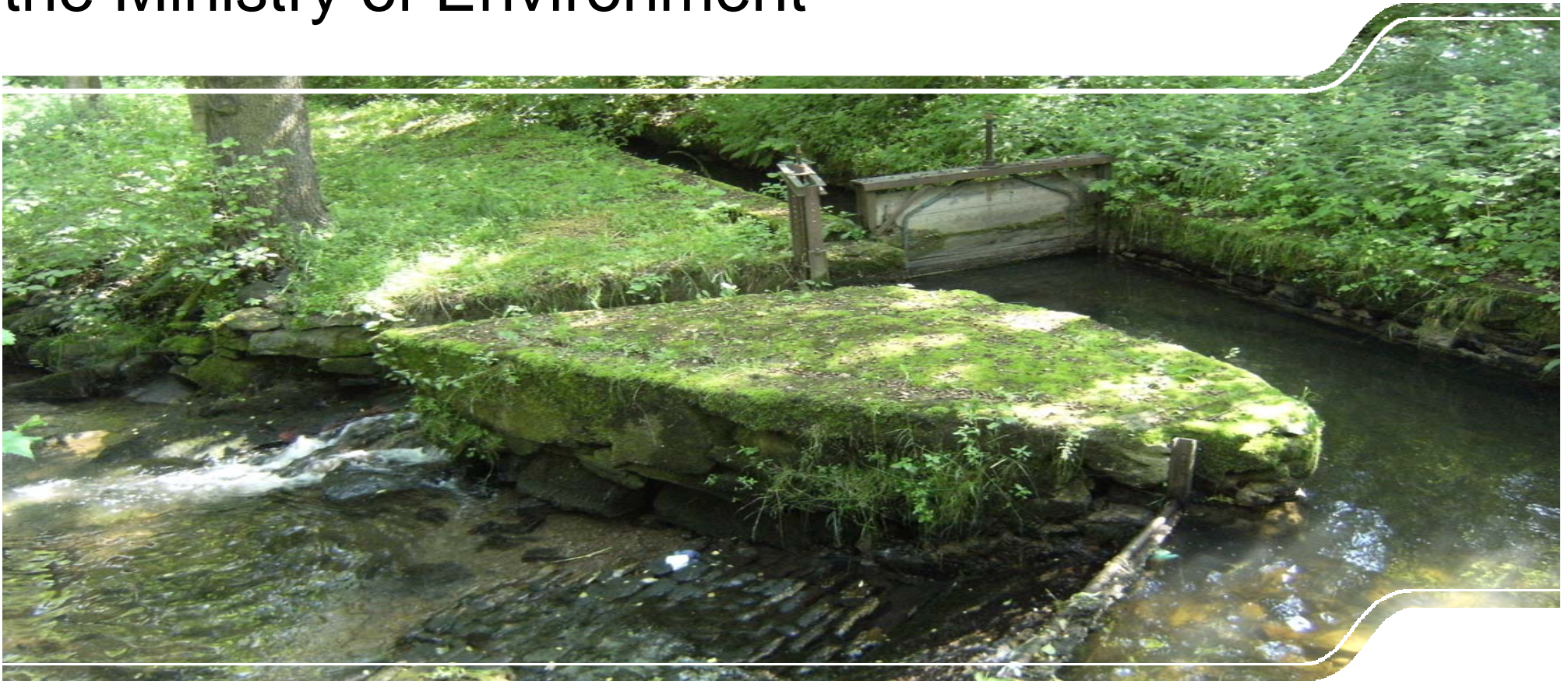
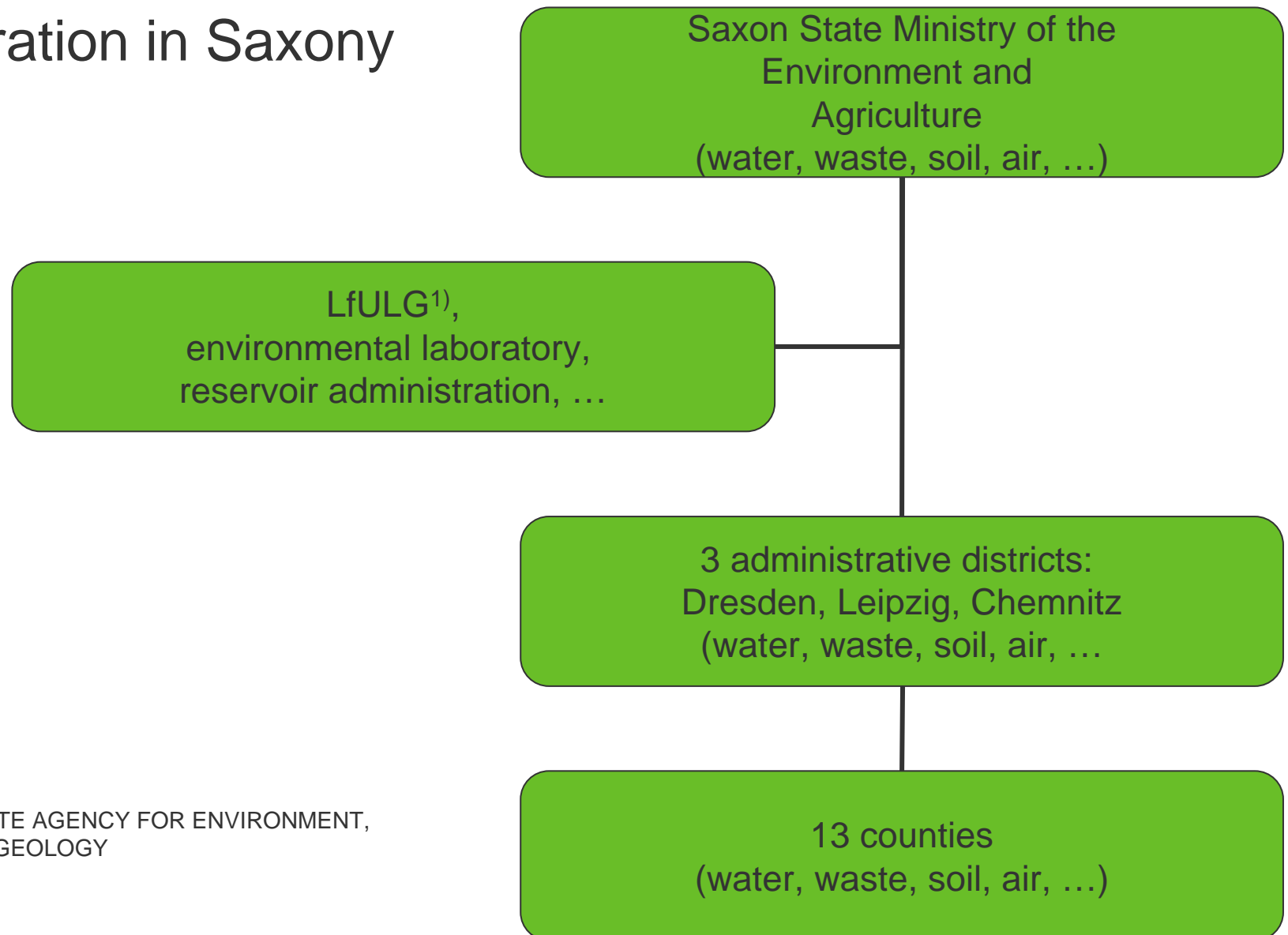


Structure of the HES and Requirements to the Universities by the Ministry of Environment

STAATSMINISTERIUM
FÜR UMWELT UND
LANDWIRTSCHAFT



Environmental Administration in Saxony



¹⁾ LfULG: SAXON STATE AGENCY FOR ENVIRONMENT,
AGRICULTURE AND GEOLOGY

Responsibilities of the Environmental Administration

- - protection, management and remediation of surface water resources
- - protection, management and remediation of groundwater
- - organization of drinking water supply and wastewater systems
- - remediation of surface- and groundwater systems after mining
- - flood protection

Required Competences of Graduates (1)

protection, management and remediation of surface water resources :

- **hydrology**
- **biology**
- **chemistry**
- **civil and water engineering**

Required Competences of Graduates (2)

protection, management and remediation of groundwater :

- **Hydrogeology**
- **Groundwater (exploration, simulation)**
- **chemistry**
- **Well construction**

Required Competences of Graduates (3)

organization of drinking water supply and wastewater systems :

- **technology of raw- and wastewater treatment**
- **supply systems**
- **economy**
- **water engineering**

Required Competences of Graduates (4)

- I remediation of surface- and groundwatersystem after mining:
 - hydrology, hydrogeology
 - water resources management
 - chemistry
 - civil and water engineering

Required Competences of Graduates (5)

I flood protection :

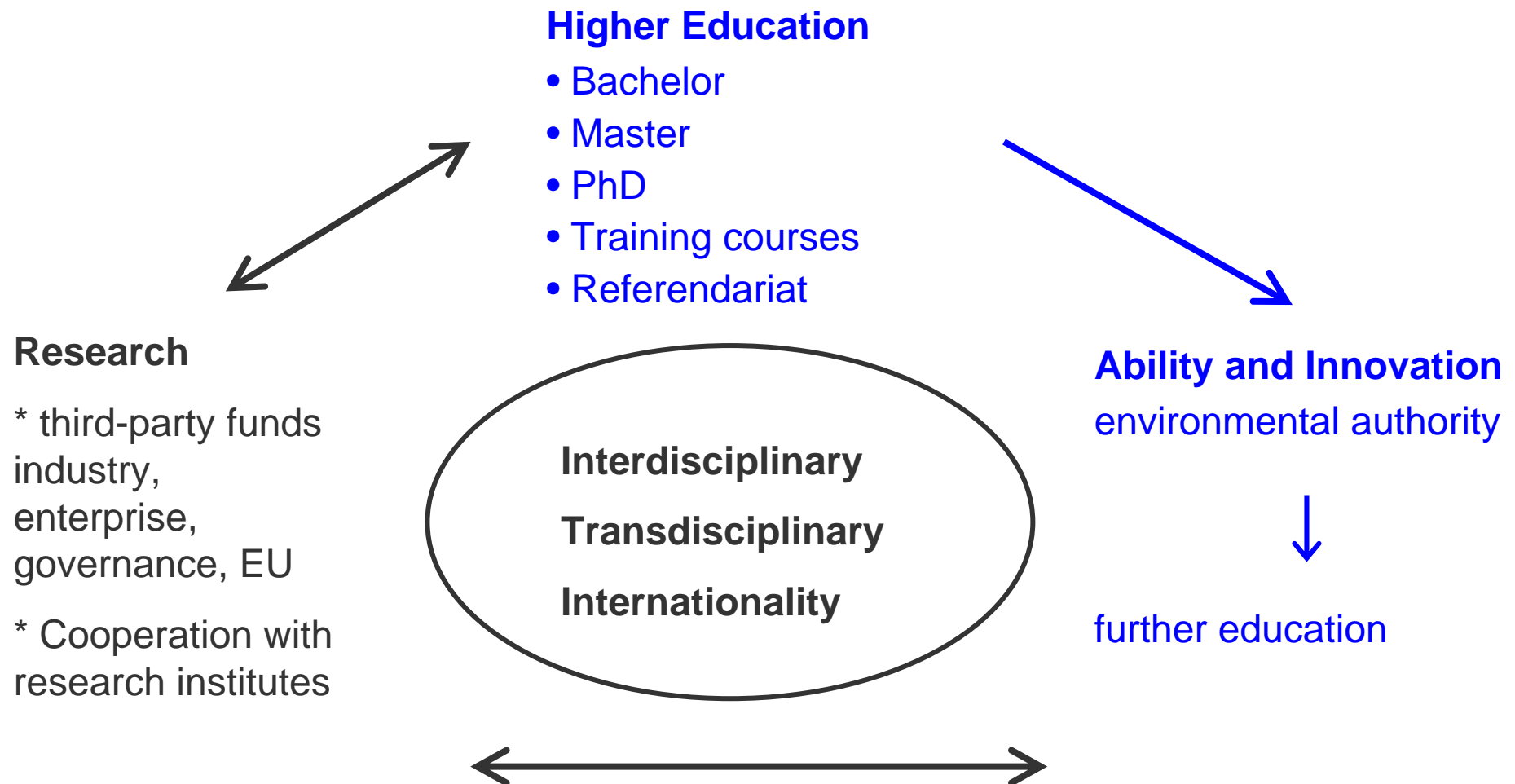
- meteorology, hydrology
- modelling und simulation
- civil engineering, dam construction

Required Competences of Graduates (6)

I General Requirements:

- various tasks → generalists are better than specialists
- knowledge: law (environmental and other) and administration
- different tasks → different graduates: BSc, MSc, PhD
- complex analysis and conceptions related to other ecological and economical issues
- IWRM (Integrated Water Resources Management)

Main Way of Graduates to the Environmental Ministry



Reasons for Further Education in Environmental Authorities

- completion of higher education (environmental law, administration)
- development of knowledge
- new technical instruments
- change of tasks, person or structures

Further Education in Environmental Authorities - Instruments

- Training centers for public administration (for general administration in Meißen; for environmental administration in Reinhardtsgrimma)



Die Staatliche Fortbildungsstätte
Reinhardtsgrmma
Außenstelle Ramsdorf

Erbaut 1878 bis 1942, rustikal gestaltet,
Im Landschaftsschutzgebiet am Rande der
Dippoldswalder Heide gelegen.

Hier stehen Ihnen 1 Hörsaal – 20 Plätze
1 Seminarraum – 11 Plätze

sowie Übernachtungsmöglichkeiten in
Ein- und Zweibettzimmern zur Verfügung.



Foyer



Seminarraum

Öffentliche Verkehrsführung



Kontakt:
Staatliche Fortbildungsstätte Reinhardtsgrmma
Schönhauser Str. 2, 01768 Osteritz
Telefon: (03662) 487 - 0
Telefax: (03662) 487 - 37
Telefax: 03662 4813-487324
E-Mail: Poststelle.Fortbildung@schsachsen.de
Internet: <http://www.schsachsen.de/fortbildung>
Internet: <http://www.schsachsen.de/fortbildung>
Internet: <http://www.schsachsen.de/fortbildung>

Außenstelle Ramsdorf
Hochstraße 27, 01734 Rabenau OT Ramsdorf
Telefon: (03662) 487 - 0
Telefax: (03662) 487 - 88
Telefax: 03661 1913-910724
E-Mail: Poststelle.Fortbildung@schsachsen.de

Hausungen:
Staatliche Fortbildungsstätte Reinhardtsgrmma

Kontakt:
Staatliche Fortbildungsstätte Reinhardtsgrmma

Besitzung und Satz:
Hochstraße 27, Osteritz

Direkt:
Telefon: 03662 487 324

STAATLICHE
FORTBILDUNGSSTÄTTE
REINHARDTSGRMMA



Staatliche Fortbildungsstätte Reinhardtsgrmma



Further Education in Environmental Authorities - Instruments

- Training centers for public administration (for general administration in Meißen; for environmental administration in Reinhardtsgrimma)
- courses by professional associations of engineers (DWA, DVGW, BWK, ...)

professional associations of engineers

DWA: German Association for Water, Wastewater and Waste

BWK: Association of Engineers for Water Management, Waste Management and Land Improvement

DVGW: German Technical and Scientific Association for Gas and Water

Members: people (engineers, students, scientists, ...), research institutes, enterprises, authorities and universities

Further Education in Environmental Authorities - Instruments

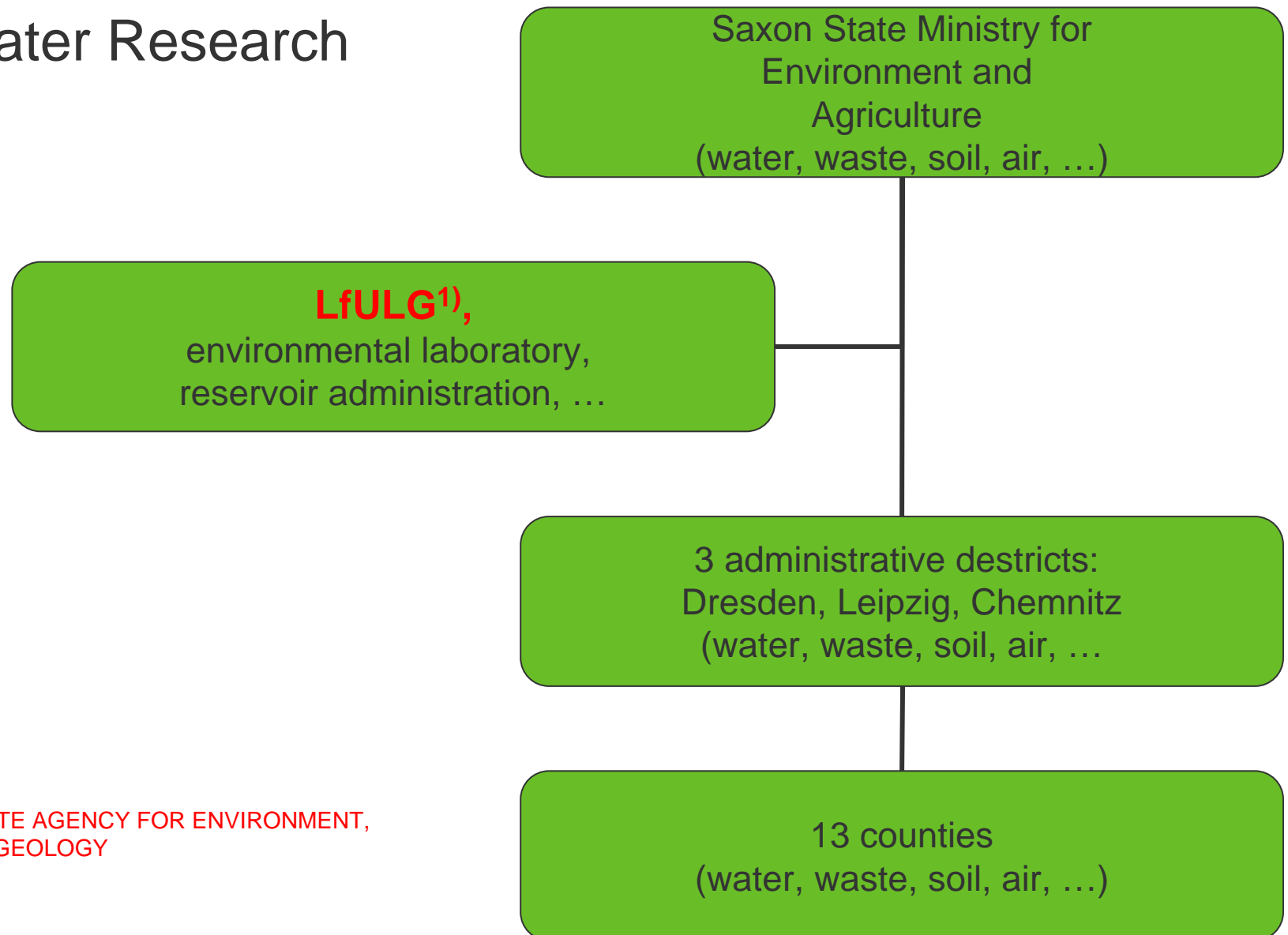
- Training centers for public administration (for general administration in Meißen; for environmental administration in Reinhardtsgrimma)
- courses by professional associations of engineers (DWA, DVWK, BWK, ...)
- courses by universities, engineering companies and other enterprises (TU Dresden, HTWK Dresden, TU BA Freiberg, BDZ Leipzig, ...)



Environmental Administration: need for Water-Research

- assessment of observations (climate protection, ...)
- development of instruments for execution of laws
- development of suggestions for political activities

Environmental Administration and Water Research

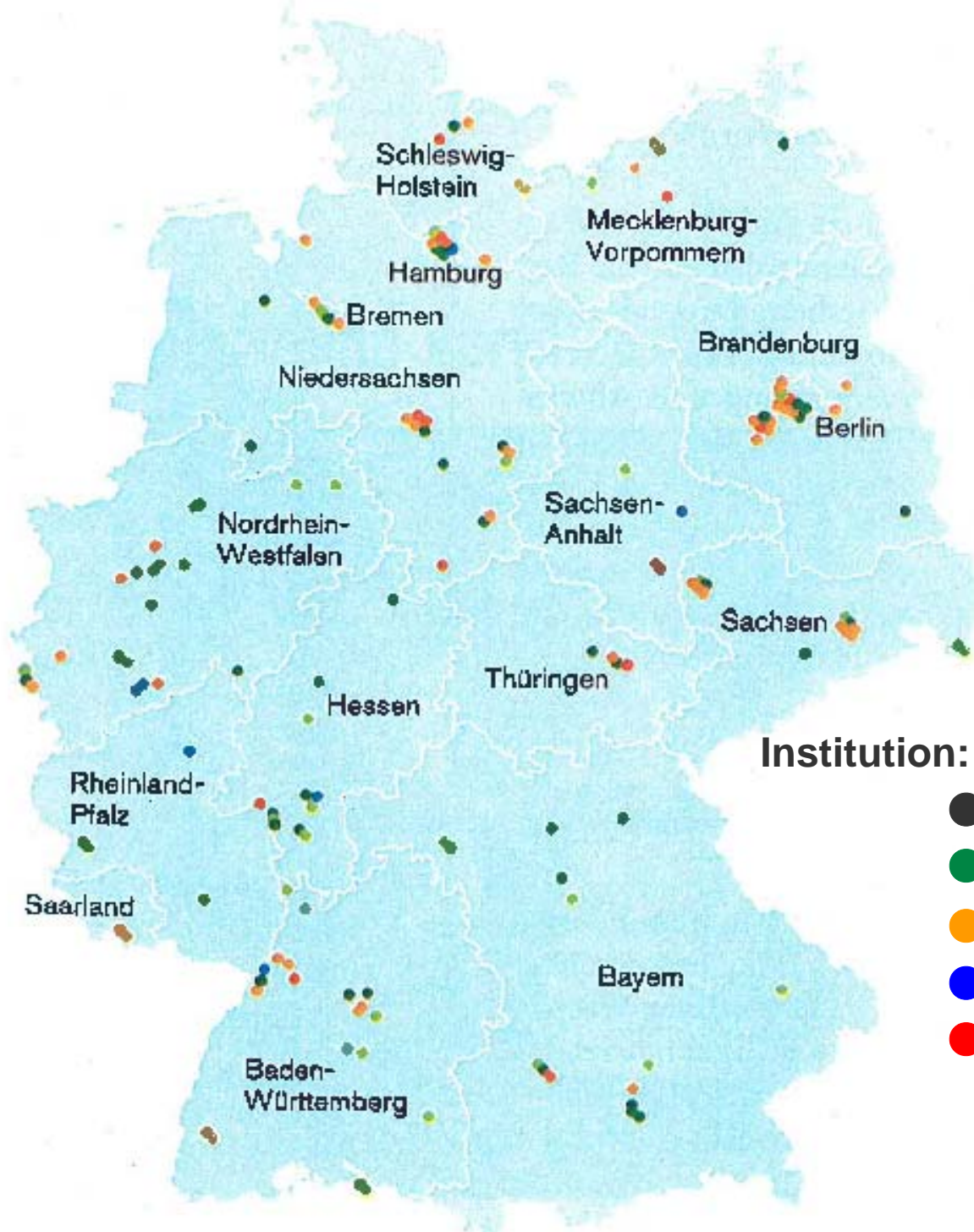


¹⁾ LfULG: SAXON STATE AGENCY FOR ENVIRONMENT,
AGRICULTURE AND GEOLOGY

Environmental Administration: Financing of Water-Research

- saxony state budget
- federal budget
- LAWA (mixed budget)

LAWA- working group of water administrations of german Laender



Water Research in Germany

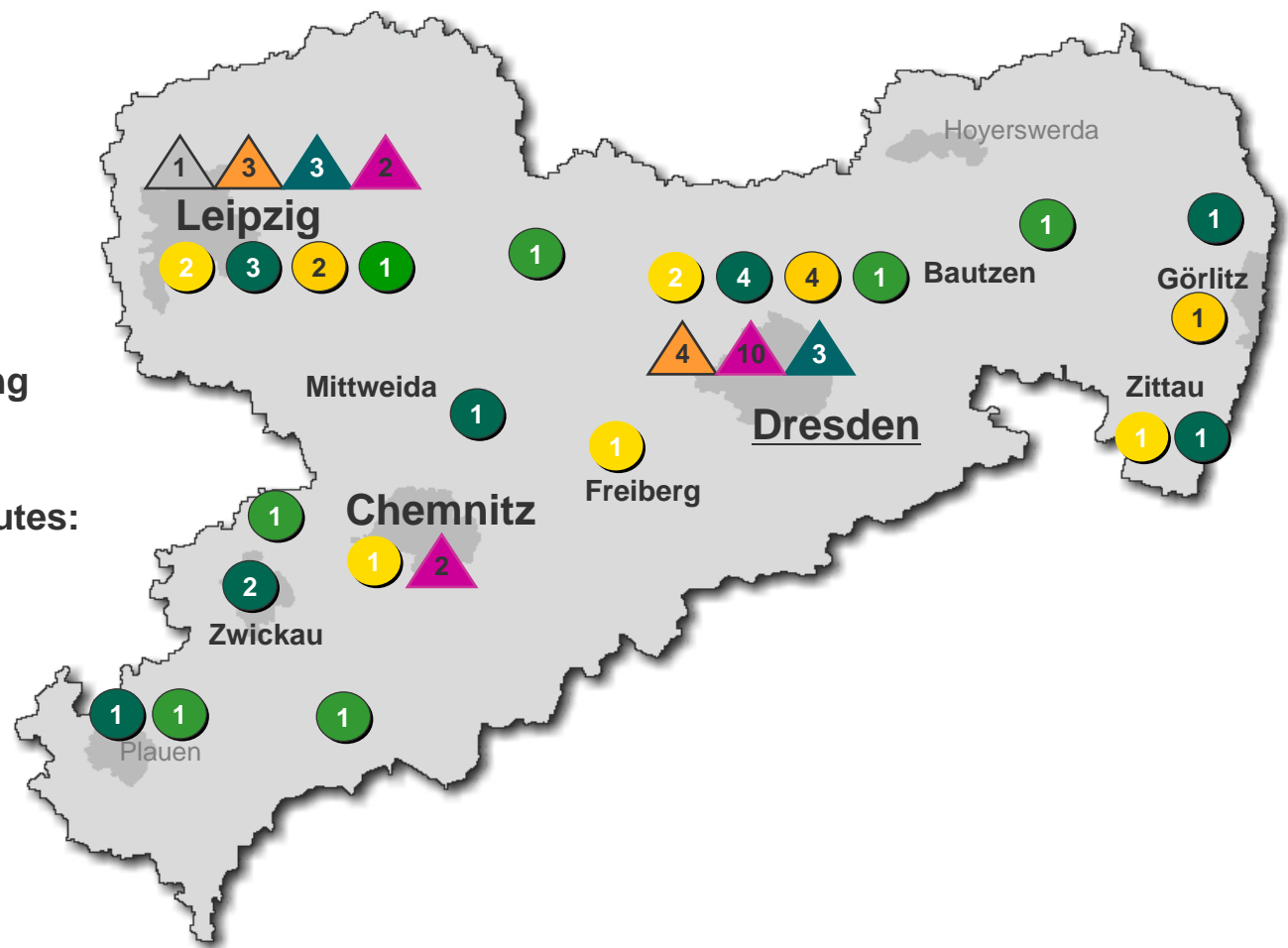
Institution:

- University
- Fachhochschule (technical college)
- Research Institution, non-university
- Federal Institution
- State Institution

Quelle: Prof. Teutsch, wwt 11-12/2010,
Stand 10/2010

Universities and Non-University Research Facilities

- 7 Universities
 - 13 Universities of Applied Sciences
 - 7 Art Academies
 - 7 State Vocational Training Academies
- Non-university research institutes:
- ▲ 1 Helmholtz
 - ▲ 7 Leibniz
 - ▲ 14 Fraunhofer
 - ▲ 6 Max-Planck



Source: SEDC, 2009

Regulation and Standardisation (generally acknowledged rules of technology)

